

Oesophagopericardial fistula as a late complication of stereotactic radiotherapy for recurrent ventricular tachycardia

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Severe adverse effects of stereotactic body radiotherapy (SBRT) for recurrent ventricular tachycardias (VTs) have not been reported. We describe the late complication of SBRT (25 Gy, CyberKnife, Accuray) in a 67-year-old patient with previous arterial coronary revascularization, including gastroepiploic artery, and subsequent recurrent VTs despite catheter ablation. He developed radiation oesophagitis 18 days after SBRT, which resolved on antiulcer therapy, and 6 months later was admitted for severe symptomatic ulcer. Despite intensive treatment, he died because of bleeding oesophagopericardial fistula. Post-mortem macroscopic picture shows the myocardial substrate in the inferior wall (black arrows) and adjacent oesophagopericardial fistula through the parietal pericardium (open arrows). Inset depicts radiosurgical treatment plan with coloured isodose lines.

Our case illustrates that SBRT may be complicated even in a long-term course, and oesophagopericardial fistula could be one of the potential complications. Therefore, the risk/benefit of SBRT for VT should be always carefully considered, and long-term follow-up is advisable.

The full-length version of this report can be viewed at: <https://www.escardio.org/Education/E-Learning/Clinical-cases/Electrophysiology>.

